



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,214	10/28/2003	Kiri B. Amarakoon	D/A2518	7332

25453 7590 02/02/2005

PATENT DOCUMENTATION CENTER
XEROX CORPORATION
100 CLINTON AVE., SOUTH, XEROX SQUARE, 20TH FLOOR
ROCHESTER, NY 14644

EXAMINER

CHEN, SOPHIA S

ART UNIT	PAPER NUMBER
----------	--------------

2852

DATE MAILED: 02/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/696,214

Applicant(s)

AMARAKOON, KIRI B.

Examiner

Sophia S. Chen

Art Unit

2852

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6 and 8 is/are rejected.
- 7) ☒ Claim(s) 4 and 7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/28/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 22, 24 (page 5, line 11), 26 (page 5, line 13), 600 (page 5, line 26), 200 (page 5, line 27, etc.), 232 (page 5, last line), 234 (page 6, line 2), 236 (page 6, line 6, etc.), and 255 (page 8, line 2). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 38, 74, 76, and 510 (Figure 1). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version

Art Unit: 2852

of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "500" has been used to designate both "an image forming apparatus" (Figure 1) and "a module" (page 5, paragraph [0015], line, etc.). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The abstract of the disclosure is objected to because of the inclusion of legal phraseology, such as "comprising" (page 16, line 2). Correction is required. See MPEP § 608.01(b).

Art Unit: 2852

5. The abstract of the disclosure is also objected to because "a second developed image" (page 16, line 4) should be "a first developed image" to be consistent with page 5, lines 11-24 of the specification.

6. The disclosure is objected to because of the following informalities:

a. Page 1, paragraph [0001], line 2, need to provide the appropriate US Pat. Application Number.

b. Page 4, line 3, "a second developed image" should be "a first developed image" to be consistent with page 5, lines 11-24 of the specification.

c. Page 6, paragraph [0017], line 5, need to provide the appropriate US Pat. Application Number.

Appropriate correction is required.

Claim Objections

7. Claims 1-8 are objected to because of the following informalities:

a. Claim 1, line 4, "a second developed image" should be "a first developed image" to be consistent with page 5, lines 11-24 of the specification.

b. Claim 2, line 2, "system for member for reducing" should be "system for reducing".

c. Claim 4, line 2, "XXX" should be "data", "information", or "mark".

d. Claim 6, line 2, "transfer station transfer" should be "first transfer station transfers".

Art Unit: 2852

e. Claim 7, line 2, "transfer station transfer" should be "first transfer station transfers".

Appropriate correction is required.

Claim Rejections – 35 USC §102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-3, 5, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Fletcher (US Pat. No. 5,347,353).

The patent discloses an electrographic printing machine comprising: a first photoconductive member 28; an imaging device 84 for recording a first latent image 20d on the first photoconductive member 28 to form a first (see above claim objection) developed image 20e; a first developing unit 86 for developing the first latent image 20d (column 9, line 55 to column 10, line 15; Figure 2); a second photoconductive member 11 (of image forming device 101, 102, or 103; see Figures 1 and 2 – Figure 1 shows the detailed of the image forming device), closely adjacent to the first photoconductive member 28 in a transfer region 33 (Figures 1 and 2); a second imaging device 18 (see Figure 1) for recording a second latent image on the second photoconductive member 11; a second developing unit 23 for developing the second latent image to form a second developed image 20c (column 10, lines 20-22 and Figures 1 and 2); a first

Art Unit: 2852

transfer station 33 for transferring the second developed image on the second photoconductive member 11 to the first photoconductive member 28 (column 10, lines 15-35); and a second transfer station 41 for transferring developed images on the first photoconductive member 28 to a recording substrate 42 (column 10, lines 53-65 and Figures 1 and 2).

The patent further discloses the first transfer station 33 includes a condition system (an electrical biasing member – a discharge device) 34 for reducing electrostatic force on the first photoconductive member 28 to improve transfer of the second developed image thereto (column 7, lines 10-21); the first developer unit 86 contains marking particle (black) of a different color of the second developer unit 23 (of device 101 – yellow color; column 10, lines 13-17 and 23-24); and the first transfer station 33 (see claim objection above) transfers the second develop image 20c in the same image frame as the first develop image 20e on the first photoconductive member 28 (column 10, lines 30-35; the develop images 20c and 20e are inherently in the same image frame because the visible image 20f on the member 28 comprises two tones – black and yellow).

Claim Rejections – 35 USC §103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2852

11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher in view of Munakata (US Pat. No. 6,493,533 B1).

Fletcher, as discussed above, differs from the instant claimed invention in not disclosing a replaceable module including the second photoconductive member and the second developer unit, the replaceable module is replaceable with a second replaceable module.

Munakata discloses an image forming apparatus comprising a replaceable module 10 (10Y, 10M, 10C, and 10K) including a photoconductive member 13 and a developer unit 16, the replaceable module is replaceable with a second replaceable module (column 4, lines 24-37).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the replaceable module as taught by Munakata to the second image forming device 101 (Figure 2) or 10 (Figure 1) (including the second photoconductive member 11 and the second developer unit 23) of Fletcher to easily replace parts by the user.

Allowable Subject Matter

12. Claims 4 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Other Prior Art

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tombs et al. (US Pat. No. 5,715,505) discloses an image forming apparatus comprising a first photoconductive member; a first imaging device; a first developer unit; a second photoconductive member; a second imaging device; a second developer unit; a first transfer station; and a second transfer station.

May et al. (US Pat. No. 5,828,931) discloses an image forming apparatus comprising a first photoconductive member; a first imaging device; a first developer unit; a second photoconductive member; a second imaging device; a second developer unit; a first transfer station; and a second transfer station.

May et al. (US Pat. No. 5,926,679) discloses an image forming apparatus comprising a first photoconductive member; a first developer unit (clear toner); a second photoconductive member; an imaging device; a second developer unit; a first transfer station; and a second transfer station.

Suzuki et al. (JP 54-059150 A) discloses an image forming apparatus comprising a first photoconductive member; a first imaging device; a first developer unit; a second photoconductive member; a second imaging device; a second developer unit; a first transfer station; and a second transfer station.

Oda et al. (JP 62-115479 A) discloses an image forming apparatus comprising a first photoconductive member; a first imaging device; a first developer unit; a second

Art Unit: 2852


photoconductive member; a second imaging device; a second developer unit; a first transfer station; and a second transfer station.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sophia S. Chen whose telephone number is (571) 272-2133. The examiner can normally be reached on M-F (7:00-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Sophia S. Chen
Primary Examiner
Art Unit 2852

Ssc
January 31, 2005